How Do You Gain Situational Awareness During An Incident?

Our Goals:

• Identify WHAT information to collect
• Identify WHO to collect from.
• HOW and WHEN to collect it.
• Develop a dashboard for data visualization.
Community Lifelines Defined
A CONSTRUCT FOR OUTCOME-BASED STABILIZATION EFFORTS

A lifeline enables the continuous operation of government functions and critical business, and is essential to human health and safety or economic security.

WHY A LIFELINES CONSTRUCT?

- Decision-makers must rapidly determine the scope, complexity, and interdependent impacts of an incident. Applying the lifelines construct allows decision-makers to:
  - Rapidly determine whether an incident is large (complicated) or complex
  - Prioritize and focus response efforts to maintain or restore the most critical services and infrastructure
  - Ensure limited resources can go toward a common goal that requires involvement across the whole community (root cause analysis vs. cascading impacts)
  - Promote a response that fosters better integration and communication across the whole community since lifeline management transcends public and private sector boundaries
Community Lifelines

Definition
A lifeline enables the continuous operation of government functions and critical business and is essential to human health and safety or economic security.

Purpose
- Root Cause Analysis
- Interdependencies
- Prioritization
- Ease of Communication

Assessing
- Status → What?
- Impact → So What?
- Actions → Now What?
- Limiting Factors → What’s the Gap?
Deconstructing Community Lifelines

- Each lifeline is comprised of several components that represent the bucketing of critical Essential Elements of Information (EEIs)
  - The EEIs are the common themes across incidents and indicate overall lifeline status
  - Components were determined by a large group of intra- and interagency Response partners

- Components includes key capabilities or services that are essential to stabilizing an incident and in providing resources to survivors

<table>
<thead>
<tr>
<th>Power (Grid)</th>
<th>Temporary Power</th>
<th>Fuel</th>
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</thead>
<tbody>
<tr>
<td>Status of electrical power generation and distribution facilities</td>
<td>Status of critical facilities</td>
<td>Status of commercial fuel stations</td>
</tr>
<tr>
<td>Number of people and locations without power</td>
<td>Availability of temporary power resources</td>
<td>Responder fuel availability</td>
</tr>
<tr>
<td>Estimated time to restoration of power</td>
<td></td>
<td>Status of critical fuel facilities</td>
</tr>
<tr>
<td>Number of electrically dependent persons (e.g., medical equipment) affected</td>
<td></td>
<td>Status of fuel supply line</td>
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<tr>
<td>Status of nuclear power plants</td>
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<tr>
<td>Status of nuclear power plants within 10 miles</td>
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<tr>
<td>Status of natural gas and fuel pipelines in the affected area</td>
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</tbody>
</table>
Transportation [RED] (as of 0700 on 12/03/2018):

Impact Statement: Critical Facilities do not have dependable power; survivors do not have access to Public Transportation for evacuation; commodity deliveries are impaired due to debris; roadways are blocked for fuel delivery and commuter routes; there is runway damage, railway communication issues, and ports are being assessed. Roadways, Mass Transit, and Maritime components are declining.
Project Development

- Align with FEMA Community Lifeline concept.
- Identify appropriate partners to collect EEI.
- Develop Essential Elements of Information (EEI) with partners.
- Develop a system to seamlessly capture the EEI’s
- Have redundancies within the process.
- Develop a dashboard for data interpretation & analysis.
Data Collection:

Lifeline Sector
Choose a sector

- Safety and Security
- Communications
- Food, Water, Sheltering
- Transportation
- Health and Medical
- Hazardous Material
- Energy (Power and Fuel)